Amendments to the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of claims:

Claims 1-140 (Cancelled)

141. (Previously presented) A method of promoting healing or regeneration of damaged eye epithelium or cornea or of the anterior segment of the eye, comprising

administering or applying to a subject afflicted with a disorder or condition associated with eye epithelium, cornea or anterior segment damage, such damage comprising a corneal epithelial defect, corneal damage following radial keratectomy, membrane rupture, corneal damage associated with eye surgery, eye injury associated with aging, physical, chemical, radiation or medication damage, or chronic corneal edema, a therapeutic amount of an agent comprising one or more members selected from the group consisting of:

a high-density lipoprotein;

a reconstituted high-density lipoprotein; and

a combination of non-cholesterol lipid components capable of reconstituting a high-density lipoprotein comprising one or more of a sphingolipid and a phospholipid, and one or more of a glyceride and a triglyceride.

142. (Previously presented) The method of claim 141, wherein the agent further comprises glycerol.

143. (Previously presented) The method of claim 141, wherein the agent further comprises at least one apolipoprotein.

144. (Previously presented) The method of claim 141, wherein the eye surgery associated with corneal damage comprises laser surgery, photorefractive keratectomy, or radial keratotomy.

145. (Previously presented) The method of claim 141, wherein the corneal damage comprises epithelium or stroma damage.

146. (Previously presented) The method of claim 141, wherein the radiation associated with eye injury comprises ultraviolet radiation or sunlight.

147. (Canceled)

148. (Previously presented) The method of claim 141, wherein the chronic corneal edema is associated with epithelium erosion or recurrent epithelium erosion.

149. (Canceled)

150. (Previously presented) The method of claim 141, wherein epithelial defect comprises a spontaneous peeling of the epithelium.

151. (Previously presented) The method of claim 141, wherein the eye injury is associated with burns.

152. (Previously presented) The method of claim 141, wherein the disorder or condition comprises spontaneous peeling or a systemic disorder or condition.

153. (Previously presented) The method of claim 152, wherein the systemic disorder or condition comprises Sjogren syndrome, Steven-Johnson syndrome, Cicatricial pemphingoid syndrome, impaired tear film formation, or chronic edema of the cornea .

154. (Previously Presented) The method of claim 141, wherein the promotion of healing or regeneration of damaged eye epithelium comprises symptom alleviation, or curing or prevention thereof.

155. (Previously Presented) The method of claim 141, wherein the eye epithelium comprises corneal and/or conjunctival epithelium.

156. (Previously Presented) The method of claim 155, wherein the corneal or conjunctival epithelium comprises epithelial cells or glands.

157. (Previously presented) The method of claim 141, wherein the disorder or condition is associated with physical damage, chemical damage, a slow regeneration rate of epithelial cells, or diminished conjunctival glandular secretion.

158. (Previously presented) The method of claim 141, wherein the disorder or condition comprises a disease or defect associated with systemic or topical medication.

159. (Previously presented) The method of claim 141, wherein the agent further comprises albumin or an ophthalgesic agent.

160. (Previously presented) The method of claim 159, wherein the ophthalgesic agent comprises one or more members selected from the group consisting of an epidermal growth factor, an attachment factor, an extracellular matrix component and a UV light protecting agent.

161. (Previously presented) The method of claim 160, wherein

the epidermal growth factor comprises keratinocyte growth factor;

the attachment factor comprises laminin or fibronectin;

the extracellular matrix component comprises collagen or a heparin sulfate proteoglycan; and/or

the UV light protecting agent comprises oxybenzone.

162. (Previously presented) The method of claim 141, wherein the agent is provided as a pharmaceutical composition further comprising an ophthalgesically acceptable carrier.

163. (Previously presented) The method of claim 162, wherein the pharmaceutical composition comprises eye drops or a salve.

164. (Previously presented) The method of claim 162, wherein the pharmaceutical composition comprises an emulsion, micelles or liposomes.

165. (Previously presented) The method of claim 162, wherein the pharmaceutical composition comprises 0.1 to 20% agent.

166. (Previously presented) The method of claim 162, wherein the pharmaceutical composition comprises 0.2 to 10% agent.

167. (Previously presented) The method of claim 162, wherein the pharmaceutical composition comprises a hyperosmotic formulation.

168. (Previously presented) The method of claim 141, wherein the agent causes a net efflux of cholesterol from cells.

169. (Canceled)

170. (Previously presented) The method of claim 141, wherein the disorder or condition comprises at least one of mechanical abrasion of the cornea, corneal epithelial defects created by contact lens wearing, corneal epithelial defects created by spontaneous peeling of the epithelium, corneal damage following photorefractive keratectomy, injuries caused by chemical substances, injuries caused by U.V. light exposure, corneal epithelium damage caused by medication, chronic edema of cornea with recurrent erosion of epithelium, and a condition caused by damage of epithelia due to radial keratotomy.

171. (Previously presented) The method of claim 141, wherein the anterior segment of the eye comprises corneal epithelium and/or stromal conjunctiva.

172. (Previously presented) The method of claim 157, wherein the slow rate of regeneration is associated with old age and/or the administration of anti-proliferative substances.

173. (Previously presented) The method of claim 141, wherein the high-density lipoprotein comprises at least one member selected from the group consisting of human high-density lipoprotein and bovine high-density lipoprotein.

174. (Previously presented) The method of claim 141, wherein the phospholipid comprises at least one member selected from the group consisting of phosphatidyl choline, phosphatidylethanolamine, phosphatidylserine ~~or~~ and phosphatidylinosital.

175. (Previously presented) The method of claim 141, wherein the sphingolipid comprise at least one sphingomyelin.

176-178. (Canceled)

179. (Previously presented) The method of claim 143, wherein the apolipoprotein comprises at least one member selected from the group consisting of apolipoprotein A-I, apolipoprotein II, ~~or~~ apolipoprotein E, apolipoprotein IV, and a combination of any two or more thereof.

180. (Canceled)

181. (Currently amended) The method of claim 141, wherein the agent comprises ~~at least one of Lipofundin ®~~ a lipid mixture having 5% soya oil, 5% medium chain triglycerides, 2.5% glycerol, and 1.2% egg lecithin or ~~Intralipid®~~ a lipid mixture having 10% soybean oil, 1.2% egg phospholipids, and 2.2% glycerol.

182. (Previously presented) The method of claim 162, wherein the pharmaceutical composition further comprises one or more members selected from the group consisting of albumin, a growth factor, an attachment factor and an extracellular component.

183. (Previously presented) The method of claim 182, wherein

the growth factor comprises at least one member selected from the group consisting of keratinocyte growth factor (KGF/FGF7), epidermal growth factor (EGF), and fibroblast growth factor (FGF);

the attachment factor comprises at least one member selected from the group consisting of laminin and fibronectin; and

the extracellular matrix component comprises at least one member selected from the group consisting of collagen and a heparan sulfate proteoglycan.

184. (Previously presented) A method of promoting healing or regeneration of damaged eye epithelium or cornea or of the anterior segment of the eye, comprising

administering or applying to a subject afflicted with a disorder or condition associated with eye epithelium, cornea or anterior segment damage, such damage comprising a corneal epithelial defect, corneal damage following radial keratectomy, membrane rupture, corneal damage associated with eye surgery, eye injury associated with aging, physical, chemical, radiation or medication damage, or chronic corneal edema, a therapeutic amount of an agent comprising:

at least one member selected from the group consisting of a high density lipoprotein and a non-cholesterol lipid component capable of reconstituting a high-density lipoprotein; and

at least one member selected from the group consisting of albumin and an ophthalgesic agent.

185. (Previously presented) The method of claim 184, wherein the ophthalgesic agent comprises one or more members selected from the group consisting of an epidermal growth factor, an attachment factor, an extracellular matrix component, and a UV light protecting agent.

186. (Previously presented) The method of claim 185, wherein

the epidermal growth factor comprises keratinocyte growth factor;

the attachment factor comprises laminin or fibronectin;

the extracellular matrix component comprises collagen or a heparin sulfate proteoglycan; and/or

the UV light protecting agent comprises oxybenzone.

187. (Previously presented) A method of promoting healing or regeneration of damaged eye epithelium or cornea or of the anterior segment of the eye, comprising

administering or applying to a subject afflicted with a disorder or condition associated with eye epithelium, cornea or anterior segment damage, such damage comprising a corneal epithelial defect, corneal damage following radial keratectomy, membrane rupture, corneal damage associated with eye surgery, eye injury associated with aging, physical, chemical, radiation or medication damage, or chronic corneal edema, a therapeutic amount of a pharmaceutical composition comprising:

one or more members selected from the group consisting of a high-density lipoprotein and a non-cholesterol lipid component capable of reconstituting a high-density lipoprotein; and

an ophthalgesically acceptable carrier.

188. (Previously presented) The method of claim 187, wherein the pharmaceutical composition comprises eye drops or a salve.

189. (Previously presented) The method of claim 187, wherein the pharmaceutical composition comprises an emulsion, micelles or liposomes.

190. (Previously presented) The method of claim 187, wherein the pharmaceutical composition comprises 0.1 to 20% agent.

191. (Previously presented) The method of claim 187, wherein the pharmaceutical composition comprises 0.2 to 10% agent.

192. (Previously presented) The method of claim 187, wherein the pharmaceutical composition comprises a hyperosmotic formulation.

193. (Previously presented) A method of promoting healing or regeneration of damaged eye epithelium or cornea, including corneal damage following radial keratectomy, or of the anterior segment of the eye, comprising

administering or applying to a subject afflicted with a disorder or condition associated with a slow regeneration rate of epithelial cells caused by at least one of old age or administration of anti-proliferative substances, a therapeutic amount of an agent comprising

one or more members selected from the group consisting of a high density lipoprotein and a non-cholesterol lipid component capable of reconstituting a high-density lipoprotein.

194. (Previously presented) A method of promoting healing or regeneration of damaged eye epithelium or cornea or of the anterior segment of the eye, comprising

administering or applying to a subject afflicted with a disorder or condition associated with eye epithelium, cornea or anterior segment damage, such damage comprising a corneal epithelial defect, corneal damage following radial keratectomy, membrane rupture, corneal damage associated with eye surgery, eye injury associated with aging, physical, chemical, radiation or medication damage, or chronic corneal edema, a therapeutic amount of an agent comprising:

a high-density lipoprotein comprising at least one member selected from the group consisting of human high-density lipoprotein; bovine high-density lipoprotein; and reconstituted high-density lipoprotein comprising at least one apolipoprotein and one or more of a phospholipid and a sphingolipid.

195. (Previously presented) A method of promoting healing or regeneration of damaged eye epithelium or cornea or of the anterior segment of the eye, comprising

administering or applying to a subject afflicted with a disorder or condition associated with eye epithelium, cornea or anterior segment damage, such damage comprising a corneal epithelial defect, corneal damage following radial keratectomy, membrane rupture, corneal damage associated with eye surgery, eye injury associated with aging, physical, chemical, radiation or medication damage, or chronic corneal edema, a therapeutic amount of an agent comprising ~~at least one of Lipofundin ®~~ a lipid mixture having 5% soya oil, 5% medium chain triglycerides, 2.5% glycerol, and 1.2% egg lecithin or ~~Intralipid®~~ a lipid mixture having 10% soybean oil, 1.2% egg phospholipids, and 2.2% glycerol.

196. (Previously presented) The method of claim 187, wherein the pharmaceutical composition further comprises one or more members selected from the group consisting of albumin, a growth factor, an attachment factor, and an extracellular component.

197. (Previously presented) The method of claim 196, wherein

the growth factor comprises at least one member selected from the group consisting of a keratinocyte growth factor, an epidermal growth factor and a fibroblast growth factor;

the attachment factor comprises at least one member selected from the group consisting of laminin and fibronectin; and/or

the extracellular matrix component comprises at least one member selected from the group consisting of collagen and a heparan sulfate proteoglycan.

198. (Previously presented) A method for treating disorders of the anterior segment of the eye including corneal damage following radial keratectomy, comprising administering to a subject in need of such treatment a therapeutically effective amount of a composition comprising one or more high-density lipoproteins selected from the group consisting of:

a natural high density lipoprotein; and

a reconstituted high density lipoprotein.

199. (Previously presented) The method of claim 198, wherein the reconstituted high density lipoprotein comprises a combination of at least one apolipoprotein and at least one non-cholesterol containing lipid component capable of reconstituting a high-density lipoprotein.

200. (Previously presented) The method of claim 199, wherein the at least one non-cholesterol containing lipid component capable of reconstituting a high-density lipoprotein comprises one or more members selected from the group consisting of a phospholipid, a spingolipid, a glyceride, a triglyceride, and glycerol.

201. (Previously presented) The method of claim 198, wherein the natural high density lipoprotein comprises one or more members selected from the group consisting of human high-density lipoprotein and bovine high-density lipoprotein.

202. (Previously presented) A method for treating disorders of the anterior segment of the eye including corneal damage following radial keratectomy, comprising administering to a subject in need of such treatment a therapeutically effective amount of a composition comprising a combination of non-cholesterol lipid components capable of reconstituting a high-density lipoprotein comprising one or more of a sphingolipid and a phospholipid, and one or more of a glyceride and a triglyceride.

203. (Currently amended)A method for treating disorders, including corneal damage following radial keratectomy, of the anterior segment of the eye comprising administering to a subject in need of such treatment a therapeutically effective amount of a composition comprising ~~Lipofundin ®~~ a lipid mixture having 5% soya oil, 5% medium chain triglycerides, 2.5% glycerol, and 1.2% egg lecithin.

204. (Previously presented) A method for treating disorders, including corneal damage following radial keratectomy, of the anterior segment of the eye comprising administering to a subject in need of such treatment a therapeutically effective amount of a composition comprising Intralipid®.

205. (New) The method of claim 141, wherein the agent is a high-density lipoprotein.

206. (New) The method of claim 141, wherein the agent is a reconstituted high-density lipoprotein.

207. (New) The method of claim 141, wherein the agent is a combination of non-cholesterol lipid components capable of reconstituting a high-density lipoprotein comprising one or more of a sphingolipid and a phospholipid, and one or more of a glyceride and a triglyceride.

208. (New) The method of claim 141, wherein the agent is reconstituted high-density lipoprotein and a combination of non-cholesterol lipid components capable of reconstituting a high-density lipoprotein comprising one or more of a sphingolipid and a phospholipid, and one or more of a glyceride and a triglyceride.